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APPLICATION NO.	FILING I	DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/892,199	06/25/2001		Ernett Altheimer	ALTE117421	9897	
26389	7590	12/02/2002				
CHRISTENS	SEN, O'CON	MOR, JOHNS	EXAMINER			
1420 FIFTH A	VENUE		ALVO, MARC S			
SUITE 2800						
SEATTLE, W	'A 98101-23	47	ART UNIT	PAPER NUMBER		
				1731		
				DATE MAILED: 12/02/2002	9	

Please find below and/or attached an Office communication concerning this application or proceeding.

به م			_		112
		Application I	v .	Applicant(s)	7
		09/892,199		ALTHEIMER ET A	·L.
	Office Action Summary	Examiner		Art Unit	
		St ve Alvo		1731	
	Th MAILING DATE of this communication ap	pp ars on the co	over sheet with the c	orrespond nce ad	dress
Period for	Reply		TYPIDE A MONTH!	S) EROM	
THE M. - Extension - Extension - If the policy - If NO p - Failure - Any res	RTENED STATUTORY PERIOD FOR REP AILING DATE OF THIS COMMUNICATION ions of time may be available under the provisions of 37 CFR 1 X (6) MONTHS from the mailing date of this communication. eriod for reply specified above is less than thirty (30) days, a re eriod for reply is specified above, the maximum statutory perio to reply within the set or extended period for reply will, by statutly received by the Office later than three months after the mail patent term adjustment. See 37 CFR 1.704(b).	I. 1.136(a). In no event, eply within the statutor of will apply and will ex	however, may a reply be tim y minimum of thirty (30) day pire SIX (6) MONTHS from	ely filed s will be considered time the mailing date of this c D (35 U.S.C. § 133).	y. ommunication.
	Responsive to communication(s) filed on 10	0 September 20	<u>102</u> .		
2a)⊠	This action is FINAL . 2b)	This action is no	n-final.		
/ -	Gines this application is in condition for allo	wance except f	or formal matters, p	rosecution as to the	ne merits is
Dispositio	closed in accordance with the practice under on of Claims	er Ex parte Qua	yle, 1935 C.D. 11, 4	133 U.G. 213.	
	Claim(s) $1-9$ is/are pending in the application				
	a) Of the above claim(s) is/are withd	rawn from cons	ideration.		
5)□(Claim(s) is/are allowed.				
6)🛛	Claim(s) <u>1-9</u> is/are rejected.				
	Claim(s) is/are objected to.				
	Claim(s) are subject to restriction and	d/or election rec	uirement.		
	on Papers	•			
9)∐ Т	he specification is objected to by the Exami	iner. kl t>□ -	hipstod to by the Eve	aminer	
10)∐ T	The drawing(s) filed on is/are: a)☐ ac	cepted or b) [] 0	e held in abevance	See 37 CFR 1.85(a)	ı .
	Applicant may not request that any objection to	u (a)gniwarib ent c ene □le esi	proved b) disappr	oved by the Exami	ner.
11)[1	The proposed drawing correction filed on				
40.C.	If approved, corrected drawings are required in				
	The oath or declaration is objected to by the	EXCHINIOI.			
	inder 35 U.S.C. §§ 119 and 120	oian priority und	er 35 U.S.C. & 119/	a)-(d) or (f).	
	Acknowledgment is made of a claim for fore	eign prionty und	Ci 55 5.5.5. 3 110(-, (-, -, (-,	
a)[☐ All b)☐ Some * c)☐ None of:	arta haya baan	received		
	1. Certified copies of the priority docum	ents have been	received in Annlina	tion No.	
	2. Certified copies of the priority docum	ents nave been	ieceiveu iii Applica	red in this Nation:	al Stage
* 5	3. Copies of the certified copies of the paper application from the International See the attached detailed Office action for a	Bureau (PC) r	(uie 17.2(a)).		• • • •
14) 🗆 4	Acknowledgment is made of a claim for dom	estic priority un	der 35 U.S.C. § 119	(e) (to a provision	nal application).
ء ا	 The translation of the foreign language Acknowledgment is made of a claim for dom 	provisional app	olication has been re	eceived.	
		rearing brigaries, an			
2) Notic	et(s) be of References Cited (PTO-892) be of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No	,	4) Interview Summa 5) Notice of Informa 6) Other:	ary (PTO-413) Paper I Il Patent Application (I	No(s) PTO-152)

Application/Control Number: 09/892,199

Art Unit: 1731

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over SINGH (text).

SINGH teaches Kraft pulping Arundo Donax and then bleaching the Kraft pulp with oxygen. The oxygen bleaching of SINGH is a TCF (totally chlorine free) bleaching process, as it does not use chlorine or chlorine dioxide. If necessary it would have been obvious that the pulp of SINGH has been subjected to a pulping process as Kraft pulping is a pulping process.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over SINGH or WO 99/66119 in view of CANADIAN PATENT 2,132,056 with or without WO 96/0943.

SINGH or WO 99/66119 teaches pulping Arundo Donax to form pulp and bleaching the pulp to brighten and whiten the pulp. CANADIAN PATENT 2,132,056 teaches TCF bleaching provides better environmental protection than either chlorine and/or chlorine dioxide (ECF) bleaching processes. It would have been obvious to the routineer to use any well-known TCF bleaching process, such as the bleaching sequences of CANADIAN PATENT 2,132,056, to provide better protection to the environment than the ECF bleaching sequence of WO 99/66119

Application/Control Number: 09/892,199

Art Unit: 1731

(see abstract and claims 21 and 31). Or obvious to include other bleaching stages, e.g. the TCF bleaching stages of CANADIAN PATENT 2,132,056, for the oxygen bleaching stage of SINGH to further brighten and whiten the pulp. Figure 1 of CANADIAN PATENT 2,132,056 teaches a Q-O/O-EOP-PPP bleaching sequence (Table 3). CANADIAN PATENT 2,132,056 further teaches that the Q-stage could follow the O-stage or be between two O-stages, see page 8, lines 15-30 and that the second oxygen stage could be an EOP stage, see paragraph bridging pages 5 and 6. Thus it would have been obvious to substitute O-EOP for the O/O stage of CANADIAN PATENT 2,132,056. It would also be obvious to start the sequence with and O-Q-O/O bleach sequence, see page 8, lines 15-30, and thus an O-QWO-EOP-PPP would have been obvious to the routineer. If this is not obvious then O-Q-P bleaching sequences would have been obvious from WO 96/09434. The Q stage is normally acidic. If this is not obvious from the CANADIAN PATENT, then such is taught by WO 96/09434, page 2, lines 26-37. It is noted that Applicant has claimed many TCF bleach sequences, which comprise the same basic stages as CANADIAN PATENT 2,132,056. The exact order of stages has not been shown to be critical. Are these TCF sequences conventional in the bleaching of pulp?

The argument that the Table of the SINGH text comes from the Robert et al article (supplied by Applicant) and discloses that the oxygen is a single stage of a multi-stage bleaching process, is not convincing as SINGH and Robert et al are comparing a single oxygen stage bleaching process to the conventional C-E bleaching process. The oxygen stage is one bleaching process and the CE stages are a conventional bleaching process. They are not stages in the same multistage bleaching process. See Robert et al, the paragraph bridging pages 49-50, where it is stated "... in the bleaching of kraft pulp (Table III) which the one-stage oxygen-caustic soda

Page 4

Application/Control Number: 09/892,199

Art Unit: 1731

treatment was compared with a conventional two-stage treatment comprising chlorination and caustic soda."

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Alvo whose telephone number is 703-308-2048. The examiner can normally be reached on 6:00 AM to 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Steve Alvo
Primary Examiner
Art Unit 1731

MSA November 29, 2002